

Appl. No.09/629,080  
Amdt. Dated February 27, 2004  
Reply to Office action of December 31, 2003

Docket No. SUN-P4677

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Original) A method for executing a dynamically loaded program, said program including a main program unit, said method comprising:  
  
executing said main program unit a first time;  
  
creating at least one library file containing only application program files loaded during said first execution of said main program unit;  
  
specifying a system program file input; and  
  
executing said main program unit a second time using said system program file input and said at least one library file for dynamically loaded program files.
2. (Original) The method of claim 1 wherein said creating further comprises:  
  
specifying a first at least one pathname for system program files;  
  
specifying a second at least one pathname for application program files;  
  
executing said main program unit using said first at least one pathname and said second at least one pathname for dynamically loaded program files; and  
  
storing each application program file loaded during execution of said main program unit to said library file.
3. (Original) The method of claim 2 wherein said storing further comprises:  
  
loading a program file when referenced during execution of said main program unit;

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storing said program file to said library file when said program file is an application program

file; and

determining whether execution of said main program unit has terminated.

4. (Original) The method of claim 3 wherein said library file further comprises a compressed file.
5. (Previously Presented) The method of claim 1 wherein said program files comprise class files and archive files.
6. (Previously Presented) The method of claim 5 wherein said system program file input comprises a collection of services and libraries included in an execution environment.
7. (Previously Presented) The method of claim 6 wherein said library file comprises an archive file.
8. (Withdrawn) A method for optimizing a dynamically loaded program, said program including a main program unit, said method comprising:  
creating at least one library file containing only application program files loaded during execution of said main program unit; and  
optimizing said program based upon a list of application program files in said library file.

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9. (Withdrawn) The method of claim 8 wherein said creating further comprises:
- specifying a first at least one pathname for system program files;
  - specifying a second at least one pathname for application program files;
  - executing said main program unit using said first at least one pathname and said second at least one pathname for dynamically loaded program files; and
  - storing each application program file loaded during execution of said main program unit to said library file.
10. (Withdrawn) The method of claim 9 wherein said storing further comprises:
- loading a program file when referenced during execution of said main program unit;
  - storing said program file to said library file when said program file is an application program file; and
  - determining whether execution of said main program unit has terminated.
11. (Withdrawn) The method of claim 10 wherein said library file further comprises a compressed file.
12. (Withdrawn) The method of claim 8 wherein said program files comprise Java™ class files and Java™ archive files.
13. (Withdrawn) The method of claim 12 wherein said system program file input comprises the Java™ Development Kit.

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14. (Withdrawn) The method of claim 13 wherein said library file comprises a Java™ archive file.
15. (Withdrawn) The method of claim 13 wherein said optimizing further comprises:  
receiving an application program pathname of a referenced program unit in said library file;  
determining a referencing program unit when said pathname is unexpected, said referencing  
program unit referencing said referenced program unit; and  
modifying said referencing program unit to remove any reference to said referenced unit.
16. (Withdrawn) A method for testing a dynamically loaded program, said program including a  
main program unit, said method comprising:  
specifying a list including at least one application program file to be tested;  
creating at least one library file containing only application program files loaded during  
execution of said main program unit; and  
indicating incomplete test coverage when at least one file in said list is not represented in  
said library file.
17. (Withdrawn) The method of claim 16 wherein said creating further comprises:  
specifying a first at least one pathname for system program files;  
specifying a second at least one pathname for application program files;  
executing said main program unit using said first at least one pathname and said second at  
least one pathname for dynamically loaded program files; and

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storing each application program file loaded during execution of said main program unit to  
said library file.

18. (Withdrawn) The method of claim 17 wherein said storing further comprises:  
loading a program file when referenced during execution of said main program unit;  
storing said program file to said library file when said program file is an application program  
file; and  
determining whether execution of said main program unit has terminated.
19. (Withdrawn) The method of claim 18 wherein said library file further comprises a  
compressed file.
20. (Withdrawn) The method of claim 16 wherein said program files comprise Java™ class  
files and Java™ archive files.
21. (Withdrawn) The method of claim 20 wherein said system program file input comprises the  
Java™ Development Kit.
22. (Withdrawn) The method of claim 21 wherein said library file comprises a Java™ archive  
file.
23. (Original) An apparatus for executing a dynamically loaded program, said program  
including a main program unit, said apparatus comprising:

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means for executing said main program unit a first time;  
means for creating at least one library file containing only application program files loaded  
during said first execution of said main program unit;  
means for specifying a system program file input; and  
means for executing said main program unit a second time using said system program file  
input and said at least one library file for dynamically loaded program files.

24. (Withdrawn) An apparatus for optimizing a dynamically loaded program, said program  
including a main program unit, said apparatus comprising:  
means for creating at least one library file containing only application program files loaded  
during execution of said main program unit; and  
means for optimizing said program based upon a list of application program files in said  
library file.

25. (Withdrawn) An apparatus for testing a dynamically loaded program, said program  
including a main program unit, said apparatus comprising:  
means for specifying a list including at least one application program file to be tested;  
means for creating at least one library file containing only application program files loaded  
during execution of said main program unit; and  
means for indicating incomplete test coverage when at least one file in said list is not  
represented in said library file.

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26. (Original) A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method to execute a dynamically loaded program, the method comprising:
- executing said main program unit a first time;
  - creating at least one library file containing only application program files loaded during said first execution of said main program unit;
  - specifying a system program file input; and
  - executing said main program unit a second time using said system program file input and said at least one library file for dynamically loaded program files.
27. (Original) The program storage device of claim 26 wherein said creating further comprises:
- specifying a first at least one pathname for system program files;
  - specifying a second at least one pathname for application program files;
  - executing said main program unit using said first at least one pathname and said second at least one pathname for dynamically loaded program files; and
  - storing each application program file loaded during execution of said main program unit to said library file.
28. (Original) The program storage device of claim 27 wherein said storing further comprises:
- loading a program file when referenced during execution of said main program unit;
  - storing said program file to said library file when said program file is an application program file; and
  - determining whether execution of said main program unit has terminated.

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29. (Previously Presented) The program storage device of claim 28 wherein said library file further comprises a compressed file.
30. (Previously Presented) The program storage device of claim 26 wherein said program files comprise class files and archive files.
31. (Previously Presented) The program storage device of claim 30 wherein said system program file input comprises class files and archive files.
32. (Previously Presented) The program storage device of claim 31 wherein said library file comprises an archive file.
33. (Withdrawn) A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method to optimize a dynamically loaded program, the method comprising:  
creating at least one library file containing only application program files loaded during execution of said main program unit; and  
optimizing said program based upon a list of application program files in said library file.
34. (Withdrawn) A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method to test a dynamically loaded program, the method comprising:  
specifying a list including at least one application program file to be tested;



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creating at least one library file containing only application program files loaded during execution of said main program unit; and  
indicating incomplete test coverage when at least one file in said list is not represented in said library file.

35. (Previously Presented) A method for representing a library file, said method including:  
storing in at least one program unit field the pathname of every application program unit loaded during the execution of a dynamically loaded program, said dynamically loaded program including a main program unit; and  
storing in a main unit field the pathname of said main program unit.

36. (Previously Presented) The method of claim 35 wherein  
said program unit field and said main unit field are contained within an archive file; and  
said main unit field comprises a manifest file.

37. (Previously Presented) The apparatus of claim 23 wherein said means for creating further comprises:  
means for specifying a first at least one pathname for system program files;  
means for specifying a second at least one pathname for application program files;  
means for executing said main program unit using said first at least one pathname and said second at least one pathname for dynamically loaded program files; and  
means for storing each application program file loaded during execution of said main program unit to said library file.

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38. (Previously Presented) The apparatus of claim 37 wherein said means for storing further comprises:
- means for loading a program file when referenced during execution of said main program unit;
- means for storing said program file to said library file when said program file is an application program file; and
- means for determining whether execution of said main program unit has terminated.
39. (Previously Presented) The apparatus of claim 38 wherein said library file further comprises a compressed file.
40. (Previously Presented) The apparatus of claim 23 wherein said program files comprise class files and archive files.
41. (Previously Presented) The apparatus of claim 40 wherein said system program file input comprises a collection of services and libraries included in an execution environment.
42. (Previously Presented) The apparatus of claim 41 wherein said library file comprises an archive file.